Synology®

DX510 User's Guide

DX51011022010

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CHAPTER 1

Get Started with DX510

Congratulations on your purchase of Synology DX510. This product is specially designed for the storage expansion of Synology DiskStation DS1511+, DS1010+, and DS710+. This user's guide will guide you through the installation.

Package Contents

Before installation, please check the package contents to verify that you have received the items below.

Main Unit

AC power Cord

User's Guide

Screws for 3.5" Hard Drives x 24

Screws for 2.5" Hard Drives x 24

eSata Cable

Hardware Specifications

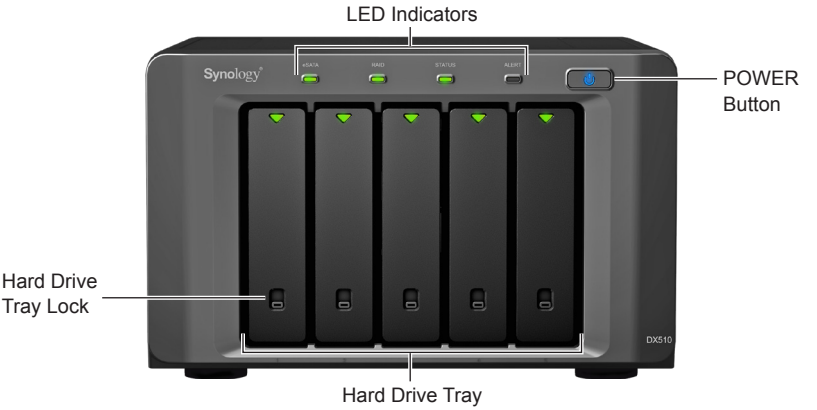
Internal HDD	5X SATA(II)
eSATA Port #	1
Max Capacity (Internal HDD)	5X 2TB
Hot Swappable HDD	Yes
Size (HxWxD) (mm)	157x248x233mm
Weight	4.10 kg
System Fan	2X (80x80mm)
Fan Speed	High / Middle / Low (Hibernation)
Noise Level (Fan-only)	30dB (2500rpm)
Power Recovery	Sync with server
AC Input Power Voltage	100V to 240V AC
Power Frequency	50 / 60Hz, Single Phase
HDD Temperature (Room: 27°C)	46°C ~ 47°C
HDD Temperature (Room: 40°C)	53°C ~ 55°C
Operating Temperature	5°C ~ 35°C (40°F ~ 95°F)
Storage Temperature	-10°C ~ 70°C (15°F ~ 155°F)
Relative Humidity	5% to 95% RH
Maximum Operating Altitude	10,000 feet
Certification	FCC Class B, CE Class B, BSMI Class B

Operating Requirements

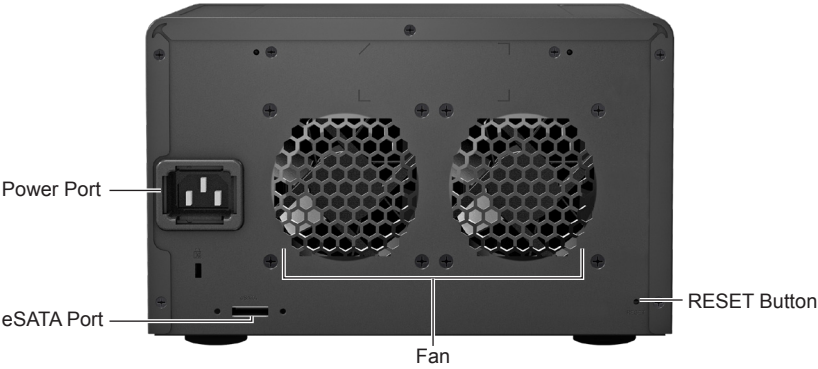
Synology DiskStation	DS1511+, DS1010+, or DS710+ with Synology DSM2.2-1032 and onwards

Appearance

Front View



Back View



Article Name	Location	Description
POWER Button	Front	The POWER button is used to turn DX510 on or off. Press and hold the button for 7 seconds to shut down DX510. ***Note:*** DX510 will be turned on or off automatically when the connected Synology DiskStation powers on or off.
LED Indicators	Front	The LED indicators are used to display the status of the internal disks and the system. For complete details, please refer to the next table: ***LED Behavior***.
Hard Drive Tray	Front	The hard drive tray is designed for loading the hard drives with DX510.

Article Name	Location	Description
Hard Drive Tray Lock	Front	Each hard drive tray is equipped with one tray lock to lock or unlock the tray to DX510.
eSATA Port	Back	The eSATA port is used to connect DX510 to DS1511+, DS1010+, or DS710+.
Fan	Back	The fan is built to exhaust waste heat out of DX510. If the fan is not working, DX510 will “beep” every few seconds.
RESET Button	Back	The RESET button is used to restore the settings to the factory default.
Power Port	Back	The power port is where you connect the power cord to DX510.

LED Behavior

LED	Behavior	Description
POWER	**Solid Blue**	Power is on
	Off	Power is off
eSATA	**Solid Green**	Synology DiskStation is connected
	Off	Synology DiskStation is disconnected
RAID	**Solid Green**	Volume is created
	Flashing Green	Volume is degraded
	Off	Volume is crashed or not created
STATUS	**Solid Green**	System is functioning
	Off	System is not working
ALERT	**Solid Orange**	Fan is not working
	Off	Fan is functioning
Hard Disk Status (on tray)	**Solid Green**	Disk is ready and idle
	Flashing Green	Disk is being accessed
	Solid Orange	Read/write or other errors are encountered
	Off	No internal disk is found

Safety Instructions

To use your Synology product safely, please follow these instructions and warnings at all time.

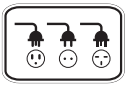
Keep away from direct sunlight and away from chemicals. Make sure the environment does not experience abrupt changes in temperature or humidity.

Keep Synology product upright. Do not lay it down horizontally.

Do not place the Synology product close to any liquid.

Before cleaning, unplug the power cord first. Wipe Synology product with damp paper towels. Do not use chemical or aerosol cleaners to clean it.

Do not place the Synology product on a cart, table, or desk, which is not stable to avoid the product from falling over.



The power cord must plug in to the right supply voltage. Make sure that the supplied AC voltage is correct and stable.

CHAPTER 2

Set Up DX510

Tools and Parts for Hard Disk Installation

- A screwdriver
- At least one 3.5” or 2.5” SATA hard disk
  (Please visit **www.synology.com** for compatible hard disk models.)

Warning: If you install a hard disk that contains data, system will format the hard disk and erase all data. If you need the data in the future, please back it up before installation.

Install Hard Disks

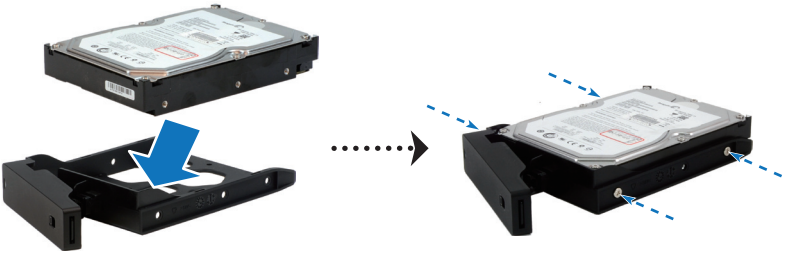
1 Slide the Lock switch upward to unlock the handle of one of the hard drive trays.

2 Press the lower part of the hard drive tray to pop out the handle.

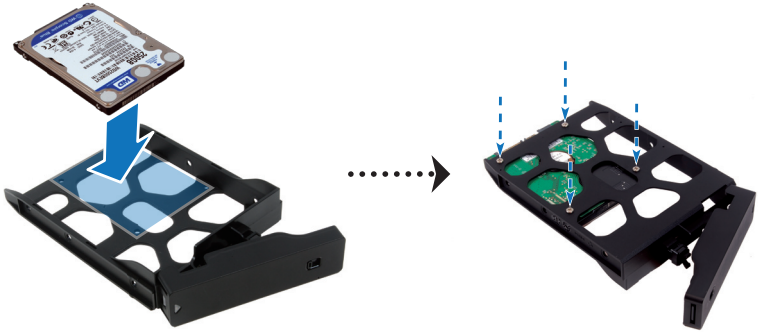
3 Pull the handle to remove the hard drive tray from DX510.

4 Load the hard disk in the hard drive tray.

- ***For 3.5" Hard Disk:*** Place the hard disk in the hard drive tray, and then tighten the screws to secure the hard disk.



- ***For 2.5” Hard Disk:*** Place the hard disk in the rectangular area (shown below) of the hard drive tray, turn the tray upside down, and then tighten the screws to secure the hard disk.



5 Insert the loaded hard drive tray into the empty hard drive bay.

> ***Important:*** Make sure the tray is pushed in all the way. Otherwise, the hard disk might not be able to function properly.

6 Press the handle in flush with the front panel to hold the hard drive tray in place.

7 Slide the Lock switch downward to lock the handle of the hard drive tray.

8 Repeat the above steps to install all the other disks on your DX510.

> ***Note:*** If you want to set up a RAID set, it is recommended that all installed hard disks are of the same size to make the best use of hard disk capacity.

Connect with Synology DiskStation

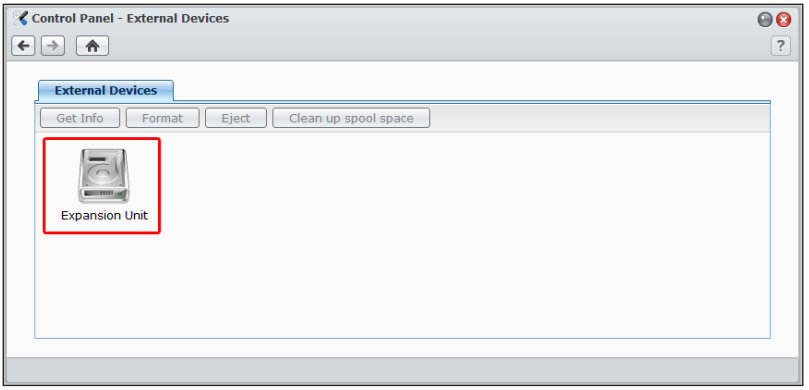
1 Connect one end of the power cord to the power port of DX510, and the other to the power outlet.

2 Connect the eSATA cable to the eSATA ports of DX510 and Synology DiskStation. You can connect up to 2 expansion units by eSATA ports to DS1511+.

After the connection is complete, DX510 will be turned on or off automatically when the connected DiskStation powers on or off.

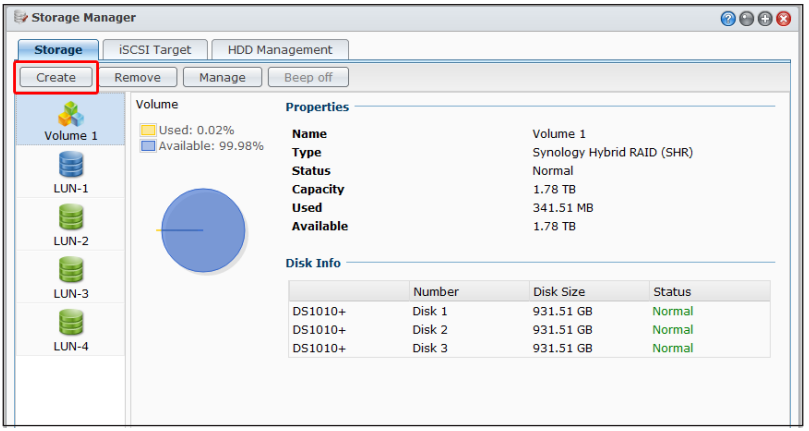
Work with Synology DiskStation

1 Open your DiskStation Manager with a web browser. Go to **Main Menu** > **Control Panel** > **External Devices** to confirm DX510 is connected to your DiskStation.

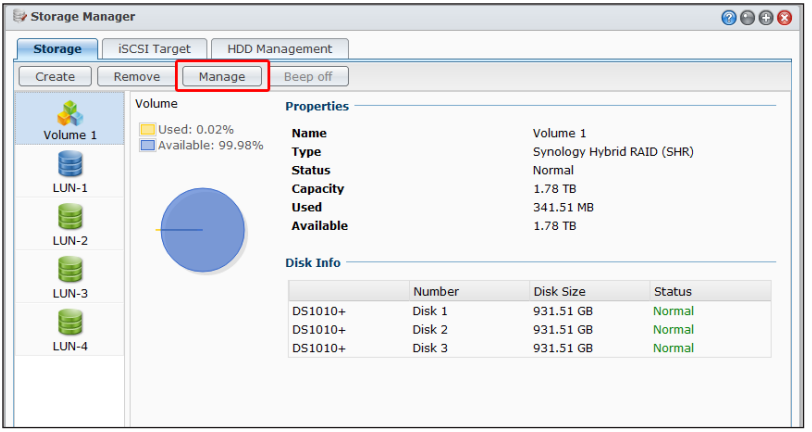


2 Go to **Main Menu** > **Storage Manager** to manage DX510 for storage creation or expansion.

- ***If you want to create a new volume with DX510,*** click **Create** and follow the Volume Creation Wizard to complete the creation.



- ***If you want to expand the existing volume with DX510,*** select the volume you want to expand from the volume list, click **Manage**, and follow the Volume Manager Wizard to complete the expansion.



For detailed information about volume management, please go to **Main Menu** > **Storage Manager** and see the help page by clicking the help button at the top-right corner.

Important: Before starting to use DiskStation with DX510, please see the following limitations of DX510.

- DX510 can be paired with only one DiskStation.
- The data of applications (such as Photo Station and Audio Station) can be stored on DX510 only if you create an expanded volume with it. They will not be stored on DX510 if you create a new volume with it.
- Hard drives previously used in DiskStation will not be readable by directly inserting them into DX510, and vise versa.

Learn More

Congratulations! Your DX510 is set up now. For more information or online resources about DX510, please visit **www.synology.com**.

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P/N: 15-06D0100B2
Printed in Taiwan